

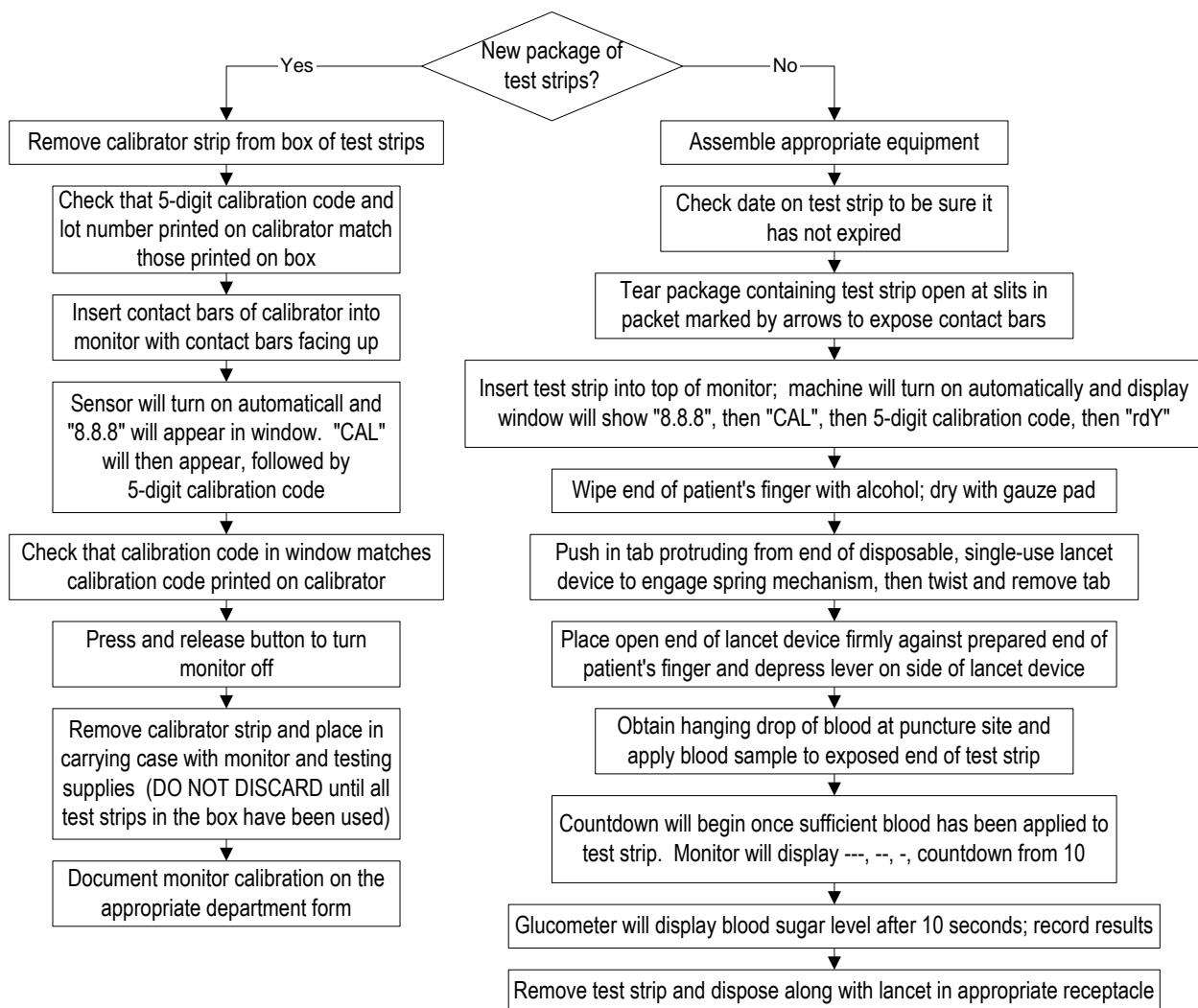
Initial: 5/96
Reviewed/revised: 5/21/08
Revision: 3

**MILWAUKEE COUNTY EMS  
PRACTICAL SKILL  
BLOOD GLUCOSE**

Approved by: Ronald Pirrallo, MD, MHSA
Signature:
Page 1 of 1

**MONITORING USING THE PRECISION Xtra® MONITOR**

<b>Purpose:</b> To obtain a blood sample and use the Precision Xtra® monitor for analysis of blood sugar level		<b>Indications:</b> Altered level of consciousness Known diabetic with signs/symptom of hypo or hyperglycemia	
<b>Advantages:</b> Provides accurate measurement of blood glucose level Quick and easy to use	<b>Disadvantages:</b> Painful fingerstick Patients on oxygen therapy may have false low result Anemic patients may have false high result	<b>Complications:</b> None	<b>Contraindications:</b> Extreme environmental temperatures Severe dehydration Patients in shock



**NOTES:**

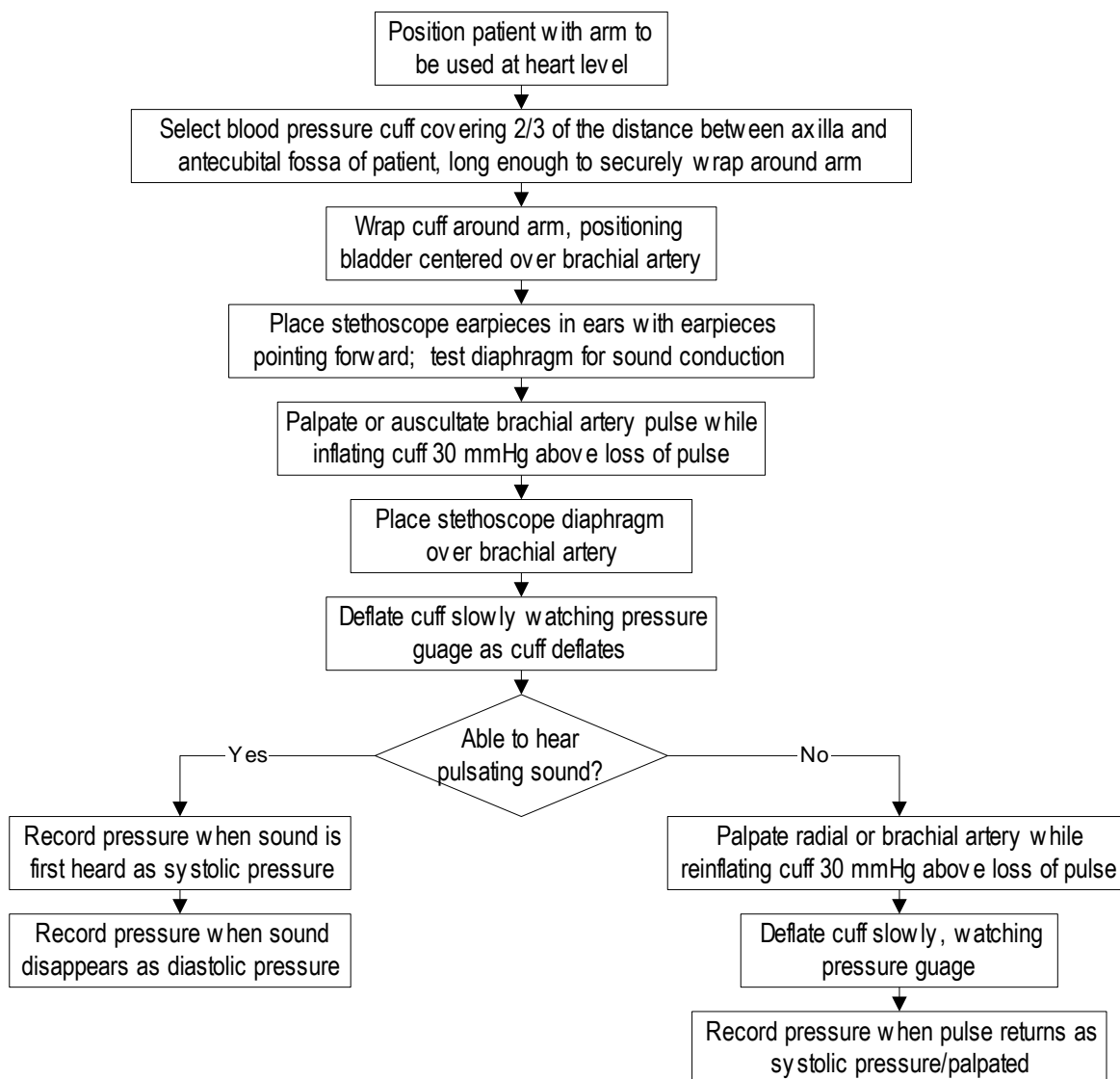
- The Precision Xtra® device must be recalibrated for every new box of strips opened. Record the calibration check as specified by department policy.

Initial: 9/94
Reviewed/revised: 5/21/08
Revision: 3

**MILWAUKEE COUNTY EMS  
PRACTICAL SKILL  
BLOOD PRESSURE  
MEASUREMENT**

Approved by: Ronald Pirrallo, MD, MHSA
Signature:
Page 1 of 1

<b>Purpose:</b>		<b>Indications:</b>	
To measure and monitor the systolic and diastolic blood pressure		All patients	
<b>Advantages:</b>	<b>Disadvantages:</b>	<b>Complications:</b>	<b>Contraindications:</b>
Multiple readings enable monitoring of patient's hemodynamic stability	Improperly sized cuff may give false reading	None	None



**NOTES:**

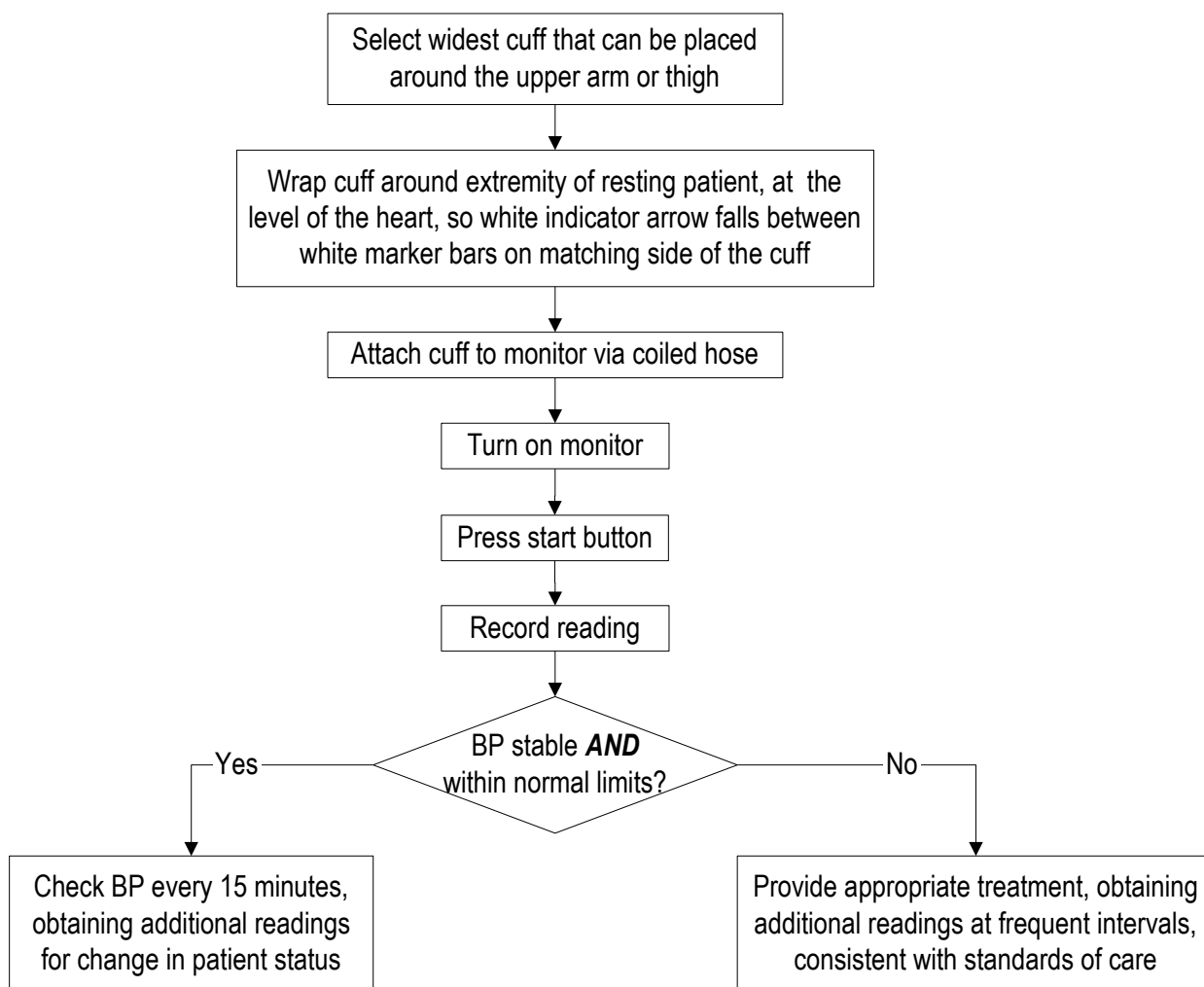
- A blood pressure cuff covering more than 2/3 of the upper arm will give a false low reading. A blood pressure cuff covering less than 2/3 will give a false high reading.
- Blood pressures should be auscultated whenever possible. The palpation method should only be used when environmental noise or conditions make it difficult to hear through the stethoscope.

Initial: 10/10/07
Reviewed/revised: 5/21/08
Revision: 1

**MILWAUKEE COUNTY EMS  
PRACTICAL SKILL  
BLOOD PRESSURE  
MONITORING - NON-INVASIVE**

Approved by: Ronald Pirrallo, MD, MHSA
Signature:
Page 1 of 1

<b>Purpose:</b> To obtain non-invasive blood pressure readings for assessment and monitoring of patients transported by EMS		<b>Indications:</b> Any patient over one year of age.	
<b>Advantages:</b>	<b>Disadvantages:</b>	<b>Complications:</b>	<b>Contraindications:</b>
Takes less time than a manual blood pressure; able to perform other tasks while obtaining blood pressure; able to track changes in blood pressure in response to interventions.	May underestimate diastolic blood pressure, especially in children.	None	Not to be used on limbs with suspected compromise in blood flow



**NOTES:**

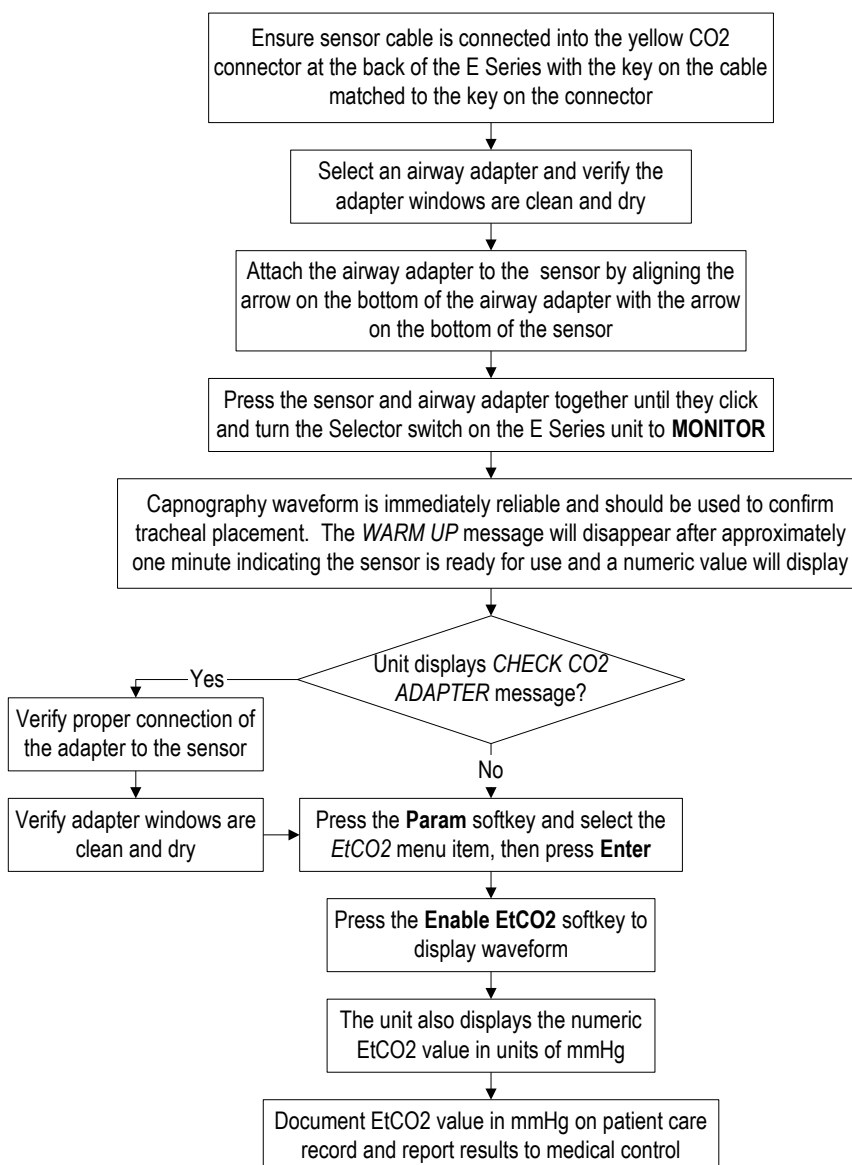
- When reading the blood pressure values on the display, keep in mind the following conditions can influence NIBP measurements: patient position; position of cuff relative to patient's heart; physical condition of the patient; patient limb movements; convulsions or tremors; very low pulse volumes; PVCs; vibration due to moving vehicles; improper cuff size or application.

Initial: 5/21/08
Reviewed/revised:
Revision:

**MILWAUKEE COUNTY EMS  
PATIENT MONITORING  
END TIDAL CARBON  
DIOXIDE (EtCO<sub>2</sub>) MONITORING**

Approved by: Ronald Pirrallo, MD, MHSA
Signature:
Page of

<b>Purpose:</b>	<b>Indications:</b>		
To aid confirmation of proper placement of advanced airway	For continuous noninvasive monitoring of end tidal carbon dioxide in all patients with an advanced airway in place.		
<b>Advantages:</b>	<b>Disadvantages:</b>	<b>Complications:</b>	<b>Contraindications:</b>
Noninvasive Rapid confirmation of correct placement	None	None	None



**NOTES:**

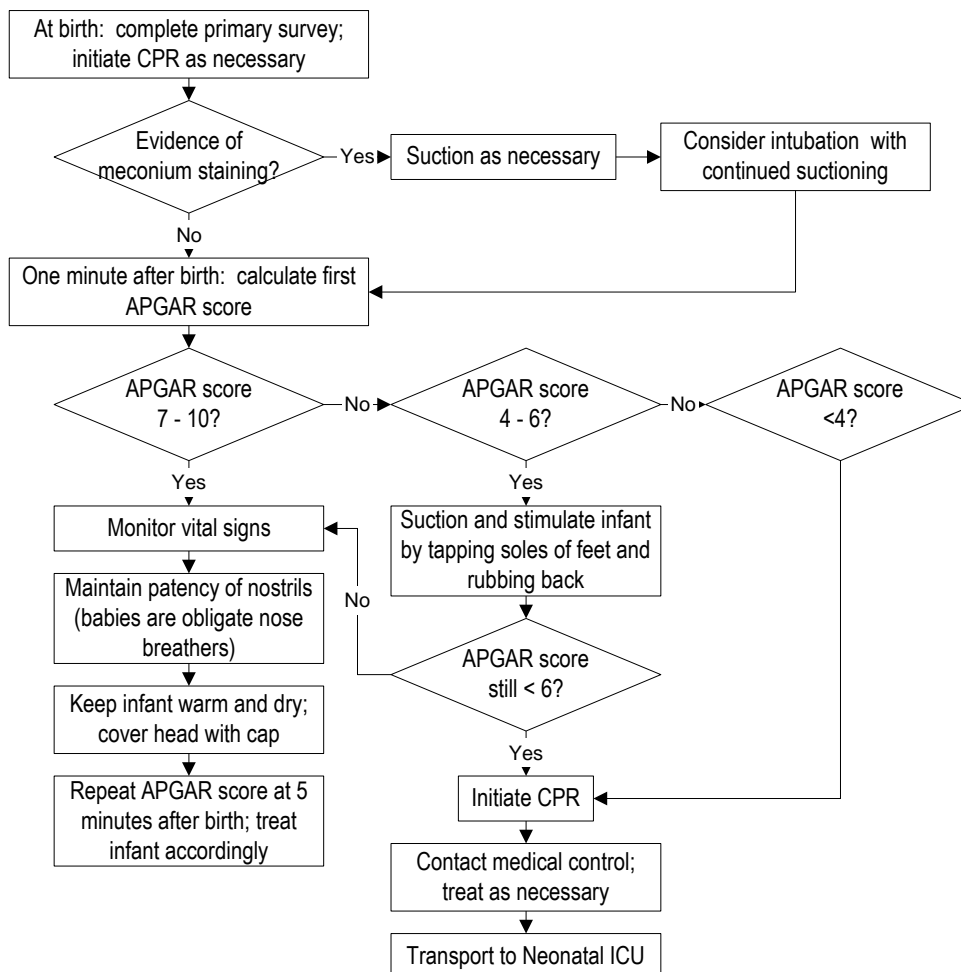
- Verify and document waveform is consistent with tracheal placement ***within 1 minute*** of intubation.
- Check level after administering 6 breaths. A false positive reading is possible in an esophageal intubation if the patient consumed a carbonated beverage prior to intubation.

Initial: 9/92
Reviewed/revised: 5/21/08
Revision: 4

**MILWAUKEE COUNTY EMS  
PRACTICAL SKILL  
NEWBORN CARE AND  
ASSESSMENT**

Approved by: Ronald Pirrallo, MD, MHSA
Signature:
Page 1 of 1

<b>Purpose:</b>	<b>Indications:</b>
To assess and care for a newborn infant	Newborn infant



**APGAR SCORE**

CRITERIA	0 POINTS	1 POINT	2 POINTS
<b>Appearance</b> (color)	Cyanotic	Body pink, extremities cyanotic	Pink
<b>Pulse</b>	Absent	< 100/minute	>100/minute
<b>Grimace</b> (response to suctioning)	None	Weak	Vigorous
<b>Activity</b> (muscle tone)	Limp	Weak	Vigorous
<b>Respiratory Effort</b>	None	Slow, irregular	Strong, crying

**NOTES:**

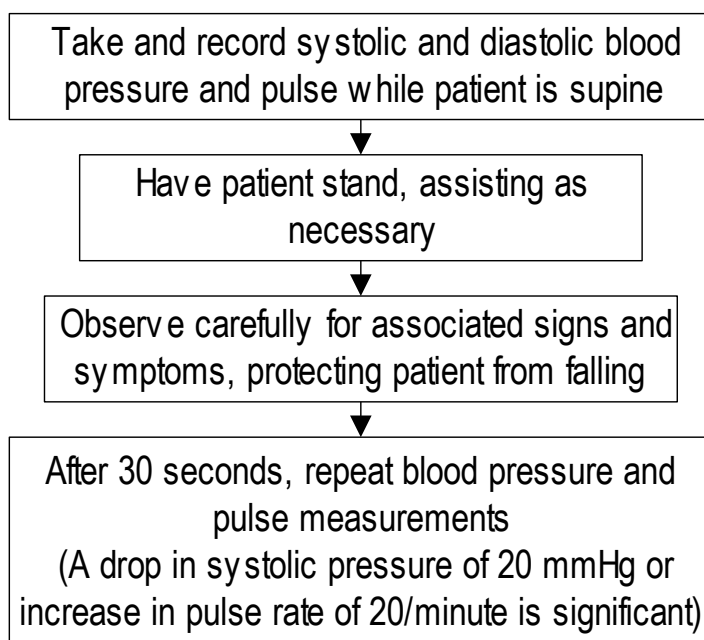
- If it's necessary to position the newborn on the back, pad the shoulders to prevent airway obstruction.
- If newborn's pulse is less than 80, begin chest compressions at 100/minute.
- The umbilical vein should be used for IV access if needed.

Initial: 7/94
Reviewed/revised: 5/21/08
Revision: 3

**MILWAUKEE COUNTY EMS  
PRACTICAL SKILL  
ORTHOSTATIC BLOOD  
PRESSURE MEASUREMENT**

Approved by: Ronald Pirrallo, MD, MHSA
Signature:
Page 1 of 1

<b>Purpose:</b> To measure postural blood pressure changes in patients with suspected hypovolemia.		<b>Indications:</b> Patients with suspected hypovolemia.	
<b>Advantages:</b> Multiple readings enable monitoring of patient's hemodynamic stability	<b>Disadvantages:</b> Improperly sized cuff may give false reading	<b>Complications:</b> Change in position may cause hypotension with associated symptoms	<b>Contraindications:</b> Supine systolic blood pressure <90



**NOTES:**

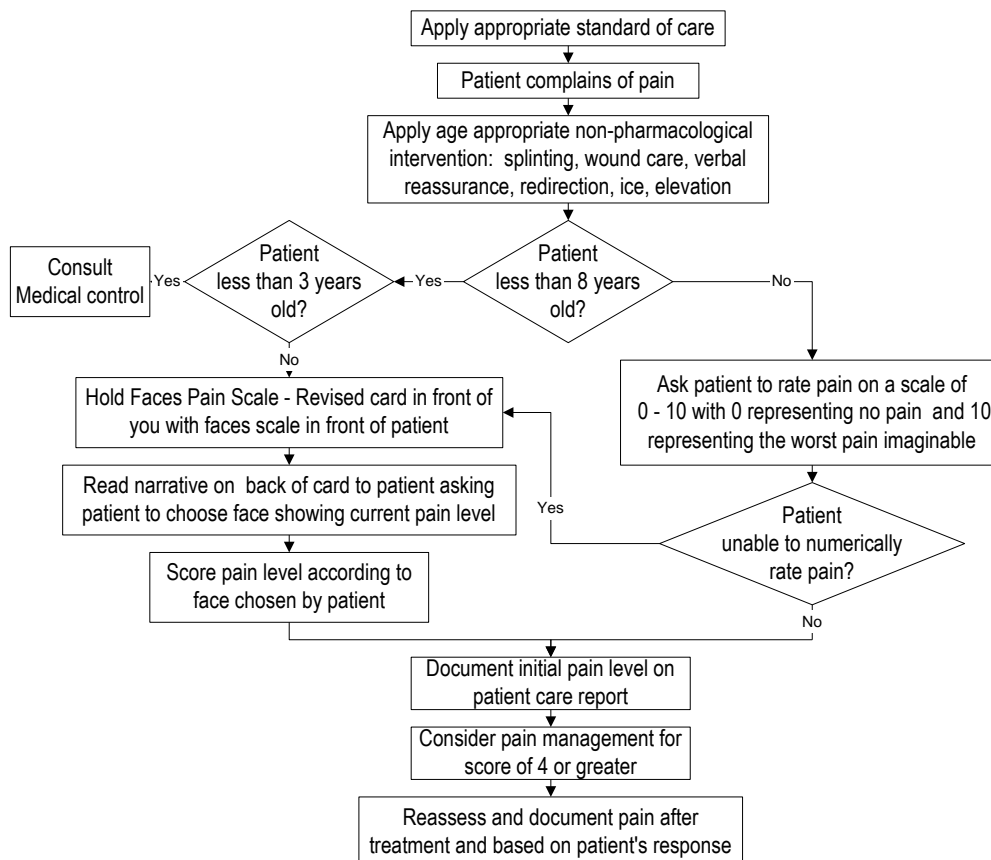
- Orthostatic (postural) hypotension is a drop in both systolic and diastolic blood pressure with a change from supine to sitting or standing position. It is generally accompanied by dizziness, blurred vision and/or syncope.

Initial: 5/21/08
Reviewed/revised:
Revision:

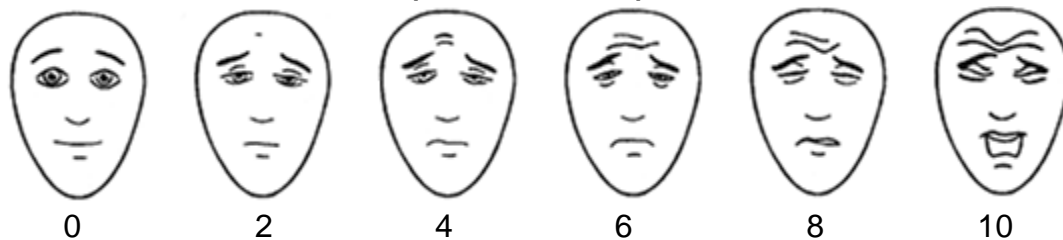
**MILWAUKEE COUNTY EMS  
PRACTICAL SKILL  
PAIN ASSESSMENT**

Approved by: Ronald Pirrallo, MD, MHSA
Signature:
Page 1 of 1

<b>Purpose:</b> To enable providers to assess a patient's pain severity		<b>Indications:</b> For all patients with pain	
<b>Advantages:</b> Simple, standardized, reliable noninvasive, consistent units Easy to administer and score Age-appropriate	<b>Disadvantages:</b> Varies from patient to patient May be difficult for patient to rate their pain	<b>Complications:</b> None	<b>Contraindications:</b> None



**Faces Pain Scale – Revised: 0 = No pain; 10 = Severe pain**



**Numeric Pain Scale: 0 = No pain; 10 = Severe pain**

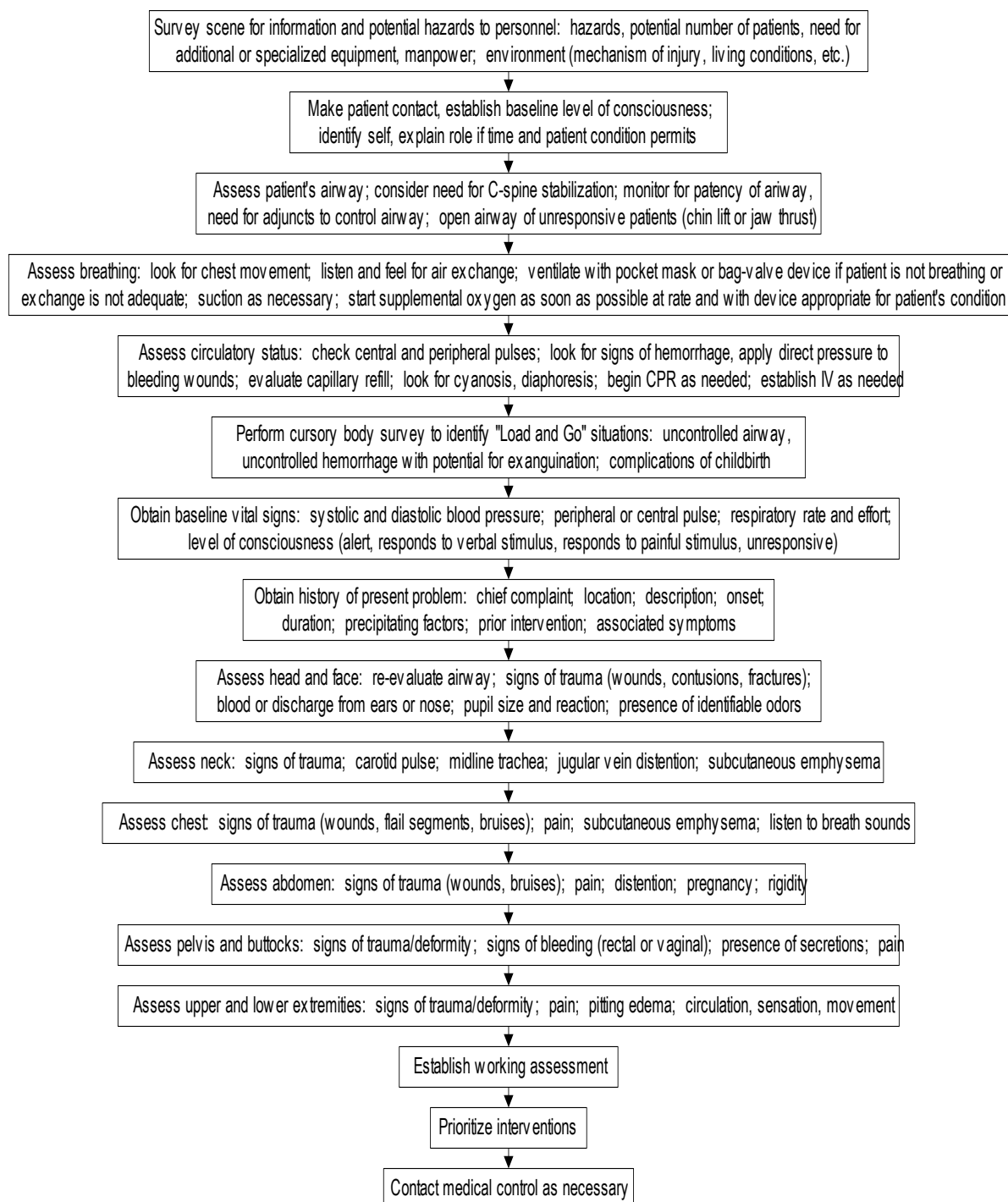


Initial: 9/92
Reviewed/revised: 5/21/08
Revision: 3

**MILWAUKEE COUNTY EMS**  
**PRACTICAL SKILL**  
**PHYSICAL ASSESSMENT**

Approved by: Ronald Pirrallo, MD, MHSA
Signature:
Page 1 of 1

<b>Purpose:</b>	<b>Indications:</b>
To complete a primary and secondary survey of patient To identify life threatening or potentially life-threatening conditions To establish a working assessment To prioritize treatment	All patients



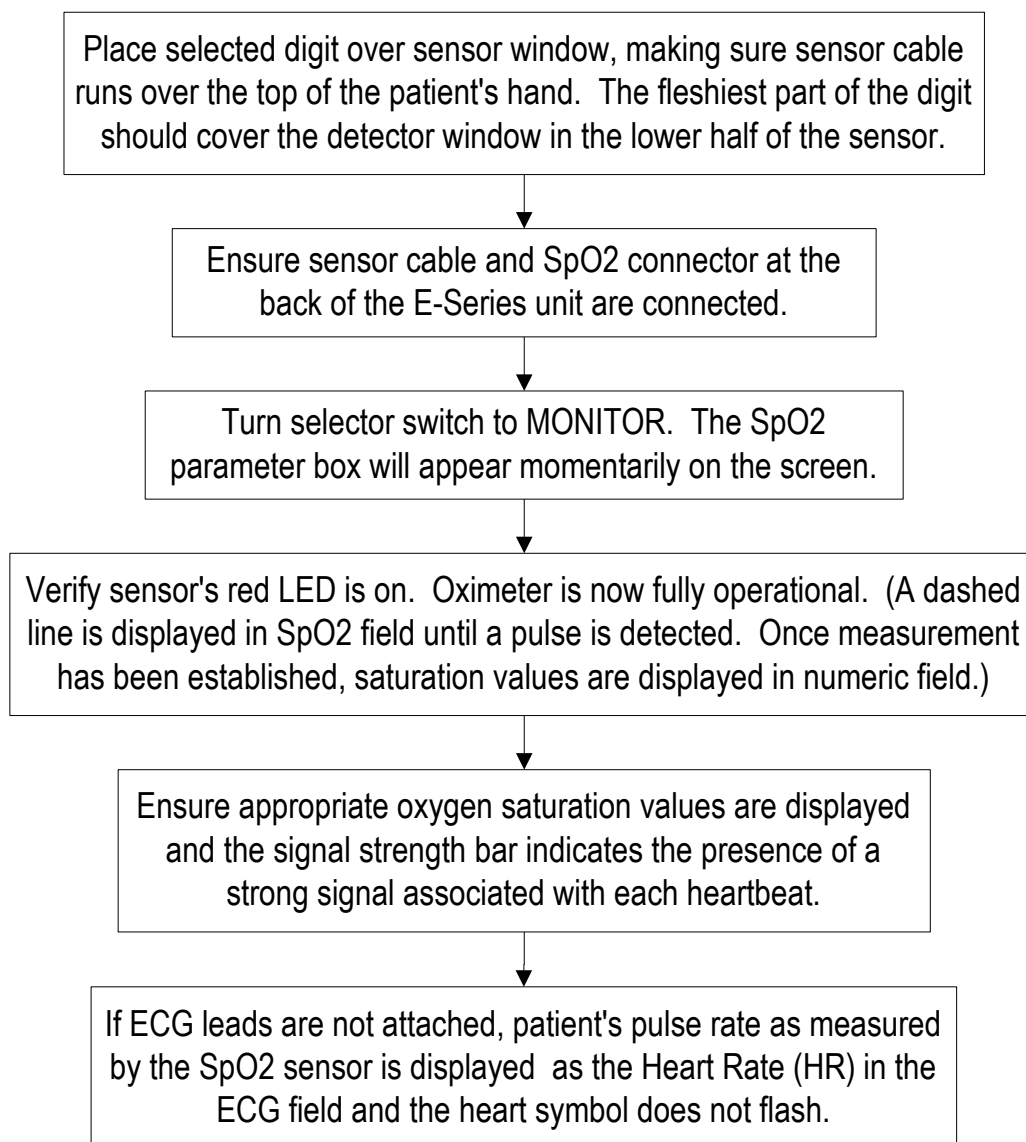


Initial: 5/21/08
Reviewed/revised:
Revision:

**MILWAUKEE COUNTY EMS**  
**PRACTICAL SKILL**  
**PULSE OXIMETRY (SpO<sub>2</sub>)**  
**MONITORING**

Approved by: Ronald Pirrallo, MD, MHSA
Signature:
Page 1 of 1

<b>Purpose:</b> For measurement of oxygen saturation of arteriolar hemoglobin at a peripheral measurement site.		<b>Indications:</b> For use in adult, pediatric, and neonatal patients.	
<b>Advantages:</b>	<b>Disadvantages:</b>	<b>Complications:</b>	<b>Contraindications:</b>
Allows continuous noninvasive monitoring.	Could have erroneous readings in some patient conditions.	None	None



**NOTES:**

- Do not attach the SpO<sub>2</sub> sensor to a limb being monitored with a blood pressure cuff or with restricted blood flow.
- Patient conditions such as cold extremities or smoke inhalation may result in erroneous oxygen saturation measurements. Assess the patient for other signs/symptoms of adequate oxygenation.